



PCT10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/031,783

DATE: 02/08/2002
TIME: 11:39:10

Input Set : A:\EP.txt
Output Set: N:\CRF3\02082002\J031783.raw

ENTERED

5 <110> APPLICANT: Herr, John C.
6 Norton, Elizabeth J.
7 Deikman, Alan B.
9 <120> TITLE OF INVENTION: Recombinant Antibody Directed Against Human Sperm
10 Antigen
12 <130> FILE REFERENCE: 00415-02
C--> 14 <140> CURRENT APPLICATION NUMBER: US/10/031,783
C--> 15 <141> CURRENT FILING DATE: 2002-10-23
17 <150> PRIOR APPLICATION NUMBER: 60/145,512
18 <151> PRIOR FILING DATE: 1999-07-23
20 <160> NUMBER OF SEQ ID NOS: 18
22 <170> SOFTWARE: PatentIn Ver. 2.1
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 116
26 <212> TYPE: PRT
27 <213> ORGANISM: Mus musculus
29 <400> SEQUENCE: 1
30 Asp Ile Glu Leu Thr Gln Ser Pro Phe Ser Leu Pro Val Ser Leu Gly
31 1 5 10 15
33 Gly Pro Ala Ser Ile Ser Cys Arg Ser Ser Gln Ser Leu Val His Ser
34 20 25 30
36 Asn Arg Asp Thr Tyr Leu His Trp Phe Leu Gln Lys Pro Gly Gln Ser
37 35 40 45
39 Pro Glu Leu Leu Ile Tyr Arg Val Ser Asn Arg Phe Ser Gly Val Pro
40 50 55 60
42 Asp Arg Phe Ser Gly Ser Gly Thr Asp Phe Thr Leu Lys Ile
43 65 70 75 80
46 Ser Arg Val Glu Ala Glu Asp Leu Gly Val Tyr Phe Cys Ser Gln Ser
47 85 90 95
49 Thr His Val Pro Phe Thr Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
50 100 105 110
52 Arg Ala Ala Ala
53 115
56 <210> SEQ ID NO: 2
57 <211> LENGTH: 348
58 <212> TYPE: DNA
59 <213> ORGANISM: Mus musculus
61 <400> SEQUENCE: 2
62 gacatcgagc tcactcagtc tccattctcc ctgcctgtca gtcttggagg tccagccctcc 60
64 atctcttgca gatctagtca gagtcttgta cacagtaata gagacactta tttacattgg 120
66 ttccctgcaga agccaggcca gtctccagag ctccctgatct acagagttc caaccgattt 180
68 tctgggttcc cagacaggtt cagttggcgtt ggatcagggaa cagatttac actcaagatc 240
70 agcagagtttggaggatc tctgggatgtt tatttctgtt ctcaaagtac acatgttcca 300

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72 ttcacgttcg gctcggggac caagctggaa atcaaacggg cggccgca 348
 76 <210> SEQ ID NO: 3
 77 <211> LENGTH: 118
 78 <212> TYPE: PRT
 79 <213> ORGANISM: Mus musculus
 81 <400> SEQUENCE: 3
 82 Gln Val Lys Leu Gln Gln Pro Gly Ser Glu Pro Val Arg Pro Gly Ala
 83 1 5 10 15
 85 Ser Val Lys Val Ser Cys Arg Ala Ser Gly Tyr Lys Phe Thr Thr Tyr
 86 20 25 30
 88 Trp Met His Trp Val Arg Gln Arg Pro Gly Gln Gly Pro Glu Trp Ile
 89 35 40 45
 91 Gly Asp Ile Tyr Pro Gly Ser Gly Asp Ser Asn Tyr Asp Val Lys Phe
 92 50 55 60
 94 Lys Asn Lys Ala Thr Leu Thr Val Asp Thr Ser Ser Ser Thr Val Tyr
 95 65 70 75 80
 97 Ile Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
 98 85 90 95
 100 Ala Arg Gly Asp Tyr Gly Cys Pro Phe Val Tyr Trp Gly Gln Gly Thr
 101 100 105 110
 103 Thr Val Thr Val Ser Ser
 104 115
 107 <210> SEQ ID NO: 4
 108 <211> LENGTH: 354
 109 <212> TYPE: DNA
 110 <213> ORGANISM: Mus musculus
 112 <400> SEQUENCE: 4
 113 caggtaaac tgcagcaacc tgggtctgaa ccggtgaggc ctggagcttc agtgaagg 60
 115 tcctgcaggg cttctggcta caaattcacc acctactgga tgactgggt gaggcagagg 120
 117 cctggacaag gcccctgagtg gattggagat atttatcctg gtatgtggta ttcttaactac 180
 119 gatgtgaagt tcaagaacaa ggcacactg actgttagaca catcctccag cacagttac 240
 121 atacaactca gcagcctgac atctgaggac tccgcggctt attactgtgc aagaggggac 300
 123 tatggttgcc cttttgttta ctggggccaa ggcaccacgg tcaccgtctc cagt 354
 127 <210> SEQ ID NO: 5
 128 <211> LENGTH: 15
 129 <212> TYPE: PRT
 130 <213> ORGANISM: Artificial Sequence
 132 <220> FEATURE:
 133 <223> OTHER INFORMATION: Description of Artificial Sequence:peptide linker
 136 <400> SEQUENCE: 5
 137 Gly Gly Gly Gly Ser Gly Gly Gly Ser Gly Gly Gly Ser
 138 1 5 10 15
 141 <210> SEQ ID NO: 6
 142 <211> LENGTH: 100
 143 <212> TYPE: DNA
 144 <213> ORGANISM: Artificial Sequence
 146 <220> FEATURE:
 147 <223> OTHER INFORMATION: Description of Artificial Sequence:PCR primer
 149 <400> SEQUENCE: 6

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150 ggcaccacgg tcaccgtctc cagtggcgcc ggcggcagcg gtggtggtgg ttctggggc 60
152 ggcggcagcg acatcgagct cactcagtct ccattctccc 100
156 <210> SEQ ID NO: 7
157 <211> LENGTH: 100
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Description of Artificial Sequence:PCR primer
164 <400> SEQUENCE: 7
165 gggagaatgg agactgagtg agctcgatgt cgctgccgc gccccagaa ccaccaccac 60
167 cgctgccgc gcccactg gagacggtga ccgtgggcc 100
171 <210> SEQ ID NO: 8
172 <211> LENGTH: 264
173 <212> TYPE: PRT
174 <213> ORGANISM: Mus musculus
176 <400> SEQUENCE: 8
177 Met Ala Gln Val Lys Leu Gln Gln Pro Gly Ser Glu Pro Val Arg Pro
178 1 5 10 15
181 Gly Ala Ser Val Lys Val Ser Cys Arg Ala Ser Gly Tyr Lys Phe Thr
182 20 25 30
184 Thr Tyr Trp Met His Trp Val Arg Gln Arg Pro Gly Gln Gly Pro Glu
185 35 40 45
187 Trp Ile Gly Asp Ile Tyr Pro Gly Ser Gly Asp Ser Asn Tyr Asp Val
188 50 55 60
190 Lys Phe Lys Asn Lys Ala Thr Leu Thr Val Asp Thr Ser Ser Ser Thr
191 65 70 75 80
193 Val Tyr Ile Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr
194 85 90 95
196 Tyr Cys Ala Arg Gly Asp Tyr Gly Cys Pro Phe Val Tyr Trp Gly Gln
197 100 105 110
199 Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly
200 115 120 125
202 Gly Ser Gly Gly Ser Asp Ile Glu Leu Thr Gln Ser Pro Phe
203 130 135 140
205 Ser Leu Pro Val Ser Leu Gly Gly Pro Ala Ser Ile Ser Cys Arg Ser
206 145 150 155 160
208 Ser Gln Ser Leu Val His Ser Asn Arg Asp Thr Tyr Leu His Trp Phe
209 165 170 175
211 Leu Gln Lys Pro Gly Gln Ser Pro Glu Leu Leu Ile Tyr Arg Val Ser
212 180 185 190
214 Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly
215 195 200 205
217 Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Leu Gly
218 210 215 220
220 Val Tyr Phe Cys Ser Gln Ser Thr His Val Pro Phe Thr Phe Gly Ser
221 225 230 235 240
223 Gly Thr Lys Leu Glu Ile Lys Arg Ala Ala Ala Gly Ala Pro Val Pro
224 245 250 255
226 Tyr Pro Asp Pro Leu Glu Pro Arg

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227 260
 230 <210> SEQ ID NO: 9
 231 <211> LENGTH: 792
 232 <212> TYPE: DNA
 233 <213> ORGANISM: Mus musculus
 235 <400> SEQUENCE: 9
 236 atggcccagg tgaaactgca gcaacctggg tctgaacccgg tgaggcctgg agttcagtg 60
 238 aagggtgcct gcagggccttc tggctacaaa ttcaccacct actggatgca ctgggtgagg 120
 240 cagaggcctg gacaaggccc tgagtggatt ggagatattt atcctggtag tggtgattct 180
 242 aactacgatg tgaagttcaa gaacaaggcc acactgactg tagacacatc ctccagcaca 240
 244 gtttacatac aactcagcag cctgacatct gaggactccg cggcttattta ctgtgcaaga 300
 246 ggggactatg gttgccctt tggttactgg ggccaaggca ccacggtcac cgtctccagt 360
 248 ggcggcggcg gcagcggtgg tgggggttct gggggcggcg gcagcgcacat cgagctca 420
 250 cagttccat tctccctgca tggcgttctt ggagggtccag cttccatctc ttgcagatct 480
 252 agtcagagtc ttgtacacag taatagagac acttatttac attgggtcct gcagaagcca 540
 254 ggccagtctc cagagctcct gatctacaga gtttccaacc gattttctgg ggtcccagac 600
 256 aggttcagtg gcagtggttc agggacagat ttcacactca agatcagcag agtggaggct 660
 258 gaggatctgg gagtttattt ctgttctcaa agtacacatg ttccattcac gttcggctcg 720
 260 gggaccaagc tggaaatcaa acgggcggcc gcaggtgcgc cgggtccgtt tccggatccg 780
 262 ctggaaaccgc gt 792
 266 <210> SEQ ID NO: 10
 267 <211> LENGTH: 792
 268 <212> TYPE: DNA
 269 <213> ORGANISM: Artificial Sequence
 271 <220> FEATURE:
 272 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
 sequence substituting bacterial codons for mouse
 codons
 276 <400> SEQUENCE: 10
 277 atggcccagg tgaaactgca gcaacctggg tctgaacccgg tgcggcctgg cgcttcagtg 60
 279 aagggtgcctt gcggcgcttc tggctacaaa ttcaccacct actggatgca ctgggtgcgc 120
 281 cagcggcctg gccaaggccc tgagtggatt ggctatattt atcctggtag tggtgattct 180
 283 aactacgatg tgaagttcaa gaacaaggcc acactgactg tagacacatc ctccagcaca 240
 285 gtttacatcc aactcagcag cctgacatct gaggactccg cggcttattta ctgtgcaaga 300
 287 ggggactatg gttgccctt tggttactgg ggccaaggca ccacggtcac cgtctccagt 360
 289 ggcggcggcg gcagcggtgg tgggggttct gggggcggcg gcagcgcacat cgagctca 420
 291 cagttccat tctccctgca tggcgttctt ggctatccag cttccatctc ttgcgcgtct 480
 293 agtcagagtc ttgtacacag taatcgcgc acctatctgc attgggtcct gcagaagcca 540
 295 ggccagtctc cagagctcct gatctaccgc gtttccaacc gattttctgg ggtcccagac 600
 297 cgcttcagtg gcagtggttc agggacagat ttcacactca agatcagcag cgtggaggct 660
 299 gaggatctgg gcttttattt ctgttctcaa agtacacatg ttccattcac gttcggctcg 720
 301 gggaccaagc tggaaatcaa acgggcggcc gcaggtgcgc cgggtccgtt tccggatccg 780
 303 ctggaaaccgc gt 792
 307 <210> SEQ ID NO: 11
 308 <211> LENGTH: 251
 309 <212> TYPE: PRT
 310 <213> ORGANISM: Artificial Sequence
 312 <220> FEATURE:
 313 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic

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314 sequence substituting amino acids in the natural
315 mouse protein to "humanize" the protein
317 <400> SEQUENCE: 11
318 Met Ala Gln Val Gln Leu Gln Gln Ser Gly Ala Glu Val Lys Lys Pro
319 1 5 10 15
321 Gly Ala Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr
322 20 25 30
324 Thr Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Gln Gly Leu Glu
325 35 40 45
327 Trp Ile Gly Asp Ile Tyr Pro Gly Ser Gly Asp Ser Asn Tyr Asp Val
328 50 55 60
330 Lys Phe Lys Asn Arg Val Thr Ile Thr Ala Asp Thr Ser Thr Ser Thr
331 65 70 75 80
333 Ala Tyr Met Gln Leu Ser Ser Leu Arg Ser Glu Asp Thr Ala Val Tyr
334 85 90 95
336 Tyr Cys Ala Arg Gly Asp Tyr Gly Cys Pro Phe Val Tyr Trp Gly Gln
337 100 105 110
339 Gly Thr Thr Val Thr Val Ser Ser Gly Gly Gly Ser Gly Gly Gly
340 115 120 125
342 Gly Ser Gly Gly Gly Ser Asp Ile Val Met Thr Gln Ser Pro Ser
343 130 135 140
345 Ser Leu Pro Val Ser Val Gly Asp Pro Ala Ser Ile Ser Cys Arg Ser
346 145 150 155 160
348 Ser Gln Ser Leu Val His Ser Asn Arg Asp Thr Tyr Leu His Trp Tyr
349 165 170 175
351 Leu Gln Lys Pro Gly Gln Ser Pro Gln Leu Leu Ile Tyr Arg Val Ser
352 180 185 190
354 Asn Arg Phe Ser Gly Val Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly
355 195 200 205
357 Thr Asp Phe Thr Leu Lys Ile Ser Arg Val Glu Ala Glu Asp Val Gly
358 210 215 220
361 Val Tyr Tyr Cys Ser Gln Ser Thr His Val Pro Phe Thr Phe Gly Gln
362 225 230 235 240
364 Gly Thr Lys Val Glu Ile Lys Arg Ala Ala Ala
365 245 250
368 <210> SEQ ID NO: 12
369 <211> LENGTH: 753
370 <212> TYPE: DNA
371 <213> ORGANISM: Artificial Sequence
373 <220> FEATURE:
374 <223> OTHER INFORMATION: Description of Artificial Sequence: synthetic
375 sequence substituting human codons for mouse
376 codons
378 <400> SEQUENCE: 12
379 atggcacaag ttcagttaca acagtctggc gcagaagttt aaaaacctgg tgcttctgtt 60
381 aaagtttctt gcaaagcttc tggttatacc tttaccacgt attggatgca ttgggttcgt 120
383 caagctcctg gtcaaggctt ggaatggatt ggtatattt atcctggttc tggtgattct 180
385 aattatgatg ttaaattttaa aaatcggtt accattaccg ctgatacctc tacctctacc 240
387 gcttatatgc aattatctag cttacgttctt gaagataccg cagtttatta ttgtgcacgt 300

VERIFICATION SUMMARY

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Input Set: A:\EP.txt

Output Set: N:\CRF3\02082002\J031783.raw

L:14 M:270 C: Current Application Number differs, Replaced Application Number

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date